



PATENT
Customer No. 22,852
Attorney Docket No. 3180.0350

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
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HIROKO NAKAMURA ET AL.)
)
Application No.: 10/760,522) Group Art Unit: 2123
)
Filed: January 21, 2004) Examiner: Unknown
)
For: COMPUTER IMPLEMENTED)
METHOD FOR DEVELOPMENT)
PROFILE SIMULATION,)
COMPUTER PROGRAM)
PRODUCT FOR CONTROLLING A)
COMPUTER SYSTEM SO AS TO)
SIMULATE DEVELOPMENT)
PROFILE, AND COMPUTER)
IMPLEMENTED METHOD FOR)
MASK PATTERN DATA)
CORRECTION)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), applicants bring to the attention of the Examiner the documents listed on the attached PTO 1449. This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits for the above-referenced application.

Copies of the listed documents are attached.

Applicants respectfully request that the Examiner consider the listed documents and indicate that they were considered by making appropriate notations on the attached form.

The following is a concise statement of relevance of the non-English language documents.

1. Japanese Patent Publication No. 2000-029217 discloses a light intensity profile that is modulated by Gaussian as the approximation of acid (catalyst for chemical amplified reaction) diffusion within resist. A two-dimensional resist profile is obtained as the contour of the light intensity profile with an intensity threshold. An English-language abstract is also provided.

2. Japanese Patent Publication No. 4-44312 discloses a dissolution rate dependence on resist thickness and exposure intensity is measured. The measured data are used for the simulation of resist profile. An English-language abstract is also provided.

3. Japanese Patent Publication No. 1-188859 discloses a dissolution rate of each resist portion which is calculated from the total amount of light energy each resist portion absorbs. An English-language abstract is also provided.

4. The article to Nakamura et al. entitled "Impact of Development Reaction Product on CD in View of Developer Alkaline Concentration Deviation," discloses an alkaline concentration variation during development affects CDs.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If the Examiner applies any of the

documents as prior art against any claim in the application and applicants determine that the cited documents do not constitute "prior art" under United States law, applicants reserve the right to present to the office the relevant facts and law regarding the appropriate status of such documents.

Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

If there is any fee due in connection with the filing of this Statement, please charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: _____

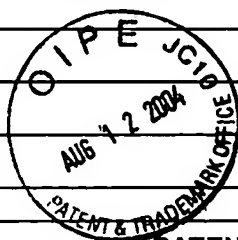
8/12/04

By: _____

Richard V. Burgujian
Reg. No. 31,744

INFORMATION DISCLOSURE CITATION

Atty. Docket No.	3180.0350	Appln. No.	10/760,522
Applicant	Nakamura et al.		
Filing Date	January 21, 2004	Group:	Unknown



U.S. PATENT DOCUMENTS

Examiner Initial*	Document Number	Issue Date	Name	Class	Sub Class	Filing Date If Appropriate
	5,889,686	3/30/99	Mimotogi et al.			

FOREIGN PATENT DOCUMENTS

Document Number	Publication Date	Country	Class	Sub Class	Translation Yes or No
2000-29217	1/28/00	Japan			Abstract
4-44312	2/14/92	Japan			Abstract
1-188859	7/28/89	Japan			Abstract

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Nakamura et al., "Influence of Alkaline Concentration Variation on CD in KrF Resist Development," Journal of Photopolymer Science and Technology (4/20/01), pp. 435-438
Nakamura et al., "Impact of Development Reaction Products on CD in View of Developer Alkaline Concentration Deviation," SPIE (2001), p. 729

Examiner	Date Considered
*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	
Form PTO 1449	Patent and Trademark Office - U.S. Department of Commerce